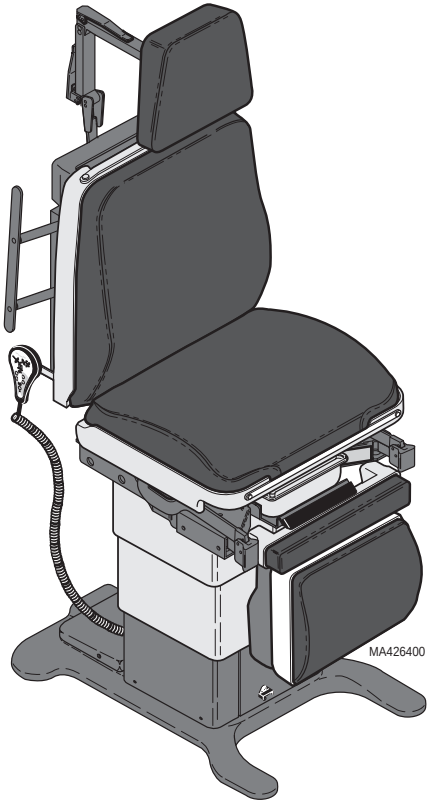
Go To Table Of Contents

MIDMARK®

CE

Installation and Operation Manual

411 Programmable Power Examination



Important Information *Page 2*

Installation *Page 4*

Description *Page 8*

Components Overview *Page 10*

Controls & Indicators *Page 11*

Operation *Page 15*

Operator Maintenance *Page 34*

Calling For Service *Page 37*

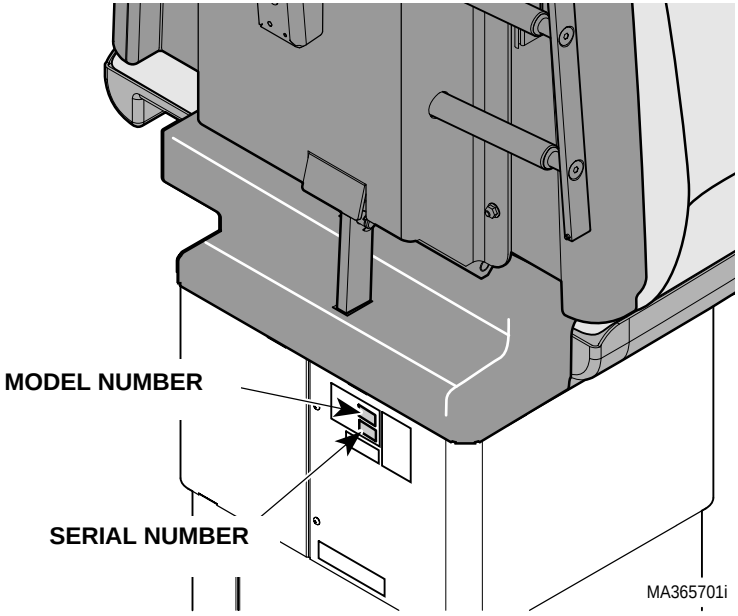
Specifications *Page 38*

Limited Warranty *Page 38*

Owner's Product Identification

(information that you will need to provide for servicing - key information is highlighted)

Date of Purchase	***Serial Number***
Name of Owner / Facility / Department	***Model Number***
Name of Authorized Midmark Dealer	Telephone # of Authorized Midmark Dealer
Address of Authorized Midmark Dealer	



CONTENTS

IMPORTANT INFORMATION 2
- Scope and Purpose of This Manual 2
- Intended Use of Product 2
- Authorized CE Representative 2
- Safety Instructions 2
- Explanation of Safety Symbols and Notes 3
- Transportation and Storage Conditions 3

INSTALLATION 4
- Unpacking 4
- Leveling The Table 5
- Installing Hand Control and Foot Control (optional) 5
- Installing Upholstery 6
- Electrical Requirements 8
- Headrest Adjustment Tools 8

DESCRIPTION 8
- Introduction 8
- Features 9

COMPONENTS OVERVIEW 10

CONTROLS & INDICATORS 11

OPERATION 15
- Power Features 15
- Hand Control 16
- Back Section Positioning 16
- Tilt Function Positioning (Table Top Angle) 17
- Table Function Positioning (Table Height) 18
- Foot Section Positioning 19
- Multiple Function Positioning 20
- Auto Return To Home Position 21
- Programming a Favorite Position 21
- Positioning Table Top Using Program Position Buttons 23
- Procto Knee Rest Positioning 24
- Stirrups 25
- Treatment Pan 26
- Paper Roll 27
- Headrest Removal / Installation 27
- Headrest Positioning 28
- Accessory Rails 28
- Foot Control Operation (optional) 29
- List of Authorized Accessories 32
- Patient Positioning 34

OPERATOR MAINTENANCE 34
- Preventive Maintenance 34
- Care of Table 35
- Headlock Assembly Adjustment 35
- Headlock Handle Stops Adjustment 37

CALLING FOR SERVICE 37

SPECIFICATIONS 38

LIMITED WARRANTY 38

IMPORTANT INFORMATION

Scope and Purpose of This Manual

This manual covers complete instructions for the installation, operation, and normal care of the 411 Programmable Power Examination Table. It is intended that this manual be used by any medical personnel responsible for operating the examination table during a medical procedure or performing operator level maintenance. No repair information is included in this manual as no repairs are authorized at the operator level.

Intended Use of Product

The product is intended to be used as either a chair or table to provide positioning and support of patients during general examinations and procedures conducted by qualified medical professionals.

Authorized CE Representative

For countries in the CE union, any questions, incidents, or complaints must be directed to Midmark's Authorized CE representative listed below:

Promotal
22, Rue De St. Denis
53500 Ernee,
FRANCE

Phone: 33-2-430-517-76
Fax: 33-2-430-569-10

Safety Instructions

The primary concern of Midmark is that this equipment is operated and maintained with the safety of the patient and staff in mind. To assure safer and more reliable operation:

- Read and understand this manual before attempting to install or operate the table.
- Assure that appropriate personnel are informed on the contents of this manual; this is the responsibility of the purchaser.
- Assure that this manual is located near the table, or if possible, permanently affixed to the table.

Explanation of Safety Symbols and Notes

DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. The DANGER symbol is limited to the most extreme situations.

WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

EQUIPMENT ALERT
Indicates an imminently or potentially hazardous situation which, if not avoided, will or may result in serious, moderate, or minor equipment damage.

NOTE
Amplifies an operating procedure, practice, or condition.

Indicates that the operator's manual should be consulted for important information.

Indicates that the product is fragile; do not handle roughly.

Indicates the proper shipping orientation for the product.

Indicates that the product must be kept dry.

Indicates the temperature limitations for storage of the unit.

Indicates the maximum stacking height of ***palleted*** units

Transportation and Storage Conditions

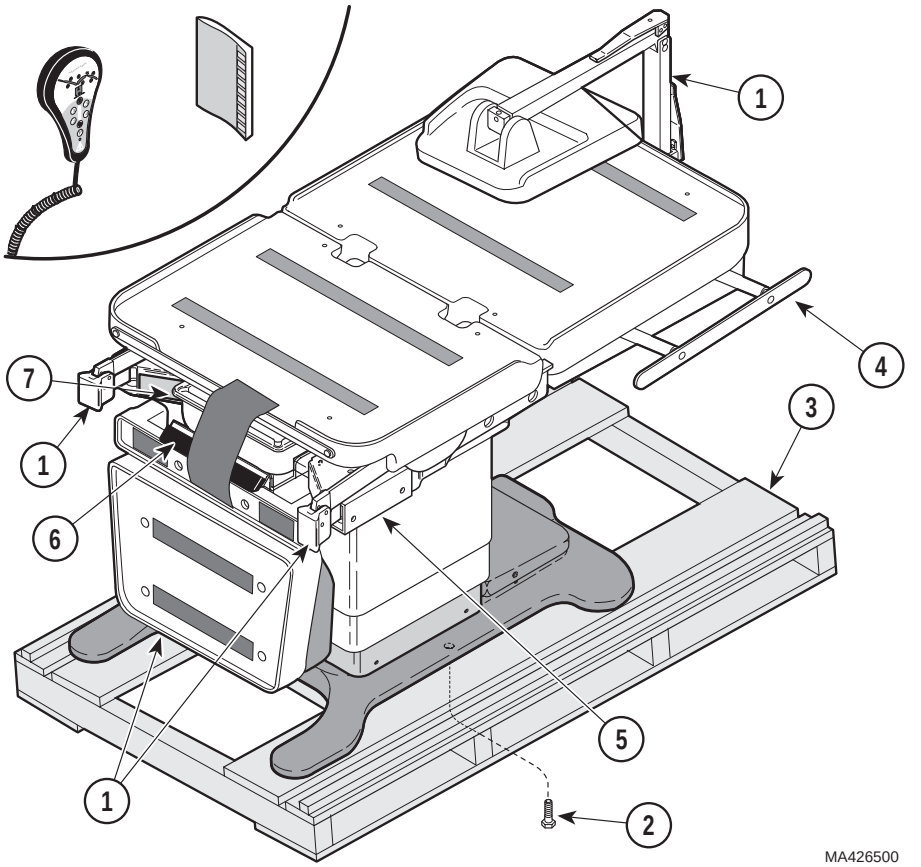
- Ambient Temperature Range:..... +5°C to +38°C (+41°F to 100°F)
- Relative Humidity..... 10% to 90% (non-condensing)
- Atmospheric Pressure ..... 500hPa to 1060hPa (0.49atm to 1.05atm)

INSTALLATION

Unpacking

EQUIPMENT ALERT
To avoid damaging the table top or side panels, do not use a knife or other sharp object to open the table's packaging. Also, to avoid damaging the table, do not lift at points (1).

Carefully remove the packaging from the table. Then, inspect the table for any shipping damage. Report any damage to the shipping company and fill out a concealed damage report.



Using a 3/4 in. (19 mm) open end wrench or socket, unbolt the table from the wooden shipping skid by removing two bolts (2) from the underside of the table's

base; one on each side.

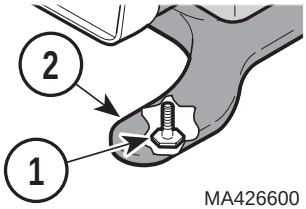
WARNING
The table weighs approximately 515 lbs (233.6 kgs). Get an assistant(s) to help remove the table from the shipping skid. Also, use proper lifting techniques when lifting table. Failure to do so could result in serious back injury.

After unbolting, remove the table from the shipping skid (3), lifting at points (4 and 5). ***Do not*** lift at points (1); these are unsupported areas. Position the table in room as desired.

Remove packing tape from stirrups. Pull out treatment pan slide (6) and remove packing tape from the treatment pan assembly components. Remove the Installation & Operation Manual and hand control from treatment pan (7). Return treatment pan slide (6) to its stowed position.

Leveling The Table

A leveling screw pad (1) is located under each corner of the table's base (2). Adjust the four leveling screw pads (1) up or down (by turning them) until a solid, level installation is achieved.



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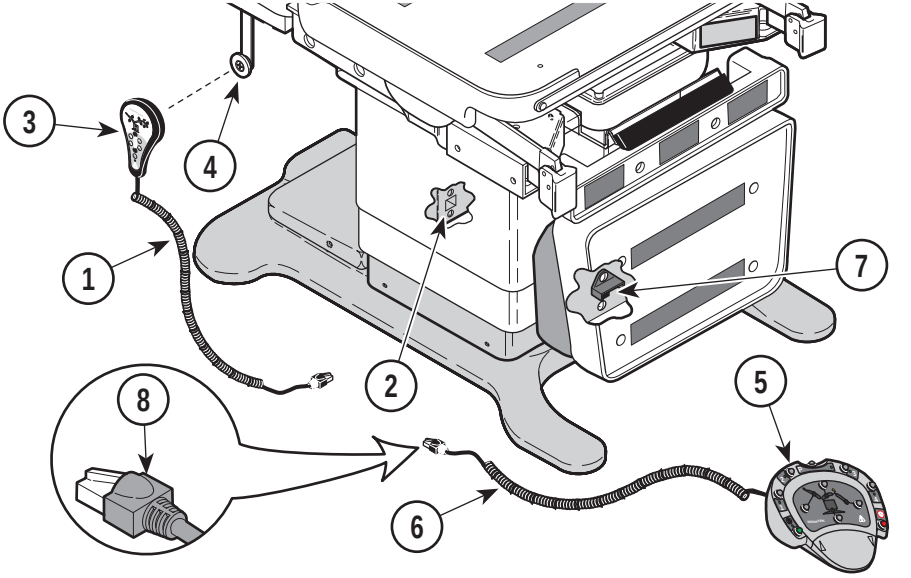
Installing Hand Control and Foot Control (optional)

NOTE
If desired, the hand control hanger (4) may be moved to the opposite side of the table by removing the two bolts and nuts securing it and then remounting it using the two predrilled holes on the opposite side of the table. If it is desired to have a hand control hanger on both sides of the table, an extra hand control hanger may be purchased.

To install the hand control, remove the hand control and hand control coil cord from its shipping location in the treatment pan assembly. Insert the end of coil cord (1) into hand control port (2). Hang the hand control (3) on the hand control hanger (4).

To install the foot control (optional accessory), remove the foot control (5) from its shipping box. Insert the end of the coil cord (6) into foot control receptacle (7).

To disconnect coil cord of hand control or foot control from table, depress the tab (8) on coil cord plug. If desired, the hand control and foot control plug-in locations may be interchanged; the hand control may be plugged into foot control



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receptacle (7) and the foot control may be plugged into hand control receptacle (2).

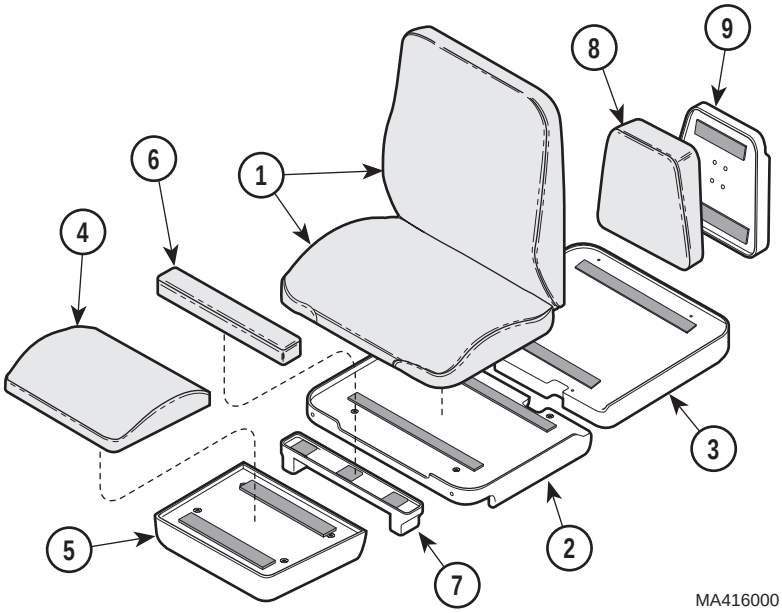
Installing Upholstery

EQUIPMENT ALERT
Do not use a knife or other sharp object to open the packaging. Failure to do so could result in damage to upholstery.

The upholstery for the table is supplied in a separate box. Remove the upholstery from the packaging and inspect it for damage. Operate the table so that the FOOT section is horizontal, the TILT function is level, and the BACK section is approximately 10° above horizontal *(See Operation in this manual for instructions)*.

To install the seat and back upholstery, install the shorter end of the seat and back upholstery (1) onto the seat board (2), while making sure the front corners of the upholstery are in alignment with the seat board. Then, press the upholstery firmly against the velcro of the seat board. Next, pull up lightly on the back portion of the seat and back upholstery (1) to fully extend the vinyl over the gap between the seat and back boards. Align the upper corners of the back upholstery with the back board (3). Then, press the upholstery firmly against the velcro of the back board.

To install the foot rest upholstery, align the foot rest upholstery (4) with the foot board (5) and then press foot rest upholstery firmly against velcro of foot



board.

To install the leg rest upholstery, align the leg rest upholstery (6) with the leg board (7) and then press leg rest upholstery firmly against velcro of leg board

To install the head rest upholstery, align the head rest upholstery (8) with the head board (9) and then press head rest upholstery firmly against velcro of head board.

Electrical Requirements

WARNING

Most exposed metal parts of the table are electrically grounded. When performing a cauterization or similar treatment, the patient must be insulated from the metal portions of the table by non-conductive material. Failure to do so could result in electrical shock or burns to patient.

Use 230 VAC, 50/60 HZ alternating current only. Failure to do so could result in electrical shock to personnel and will result in damage to table.

Do not use this table in an explosive or oxygen-enriched atmosphere. Failure to do so could result in serious personal injury or death.

NOTE

Grounding reliability can only be achieved if this equipment is connected to an equivalent receptacle marked Hospital Grade (NEMA 5-15R, HOSPITAL GRADE).

The electrical rating for the unit is 230 VAC, 50/60 Hz, 8 amps. The three-pronged grounding plug on the table power cord must be plugged into a matching three-pronged, grounded, dedicated, correctly polarized 230 VAC receptacle. The table power cord provides power for all electrical functions of the table.

Headrest Adjustment Tools

The wrenches necessary to adjust the headlock assembly have been provided. These wrenches are in a bag which has been attached to the headlock assembly of the table. Remove this bag of wrenches before using the table and store these tools with the Installation & Operation Manual.

DESCRIPTION

Introduction

The Programmable Power Examination Table is primarily used in examination rooms for general examinations and minor procedures. The combinations of its four powered motions, adjustable procto knee rest, stirrups, treatment pan, and adjustable headrest provide a table which can be tailored to facilitate most examinations and treatments being performed in a doctor's office. The table is designed to reduce the effort and fatigue, and increase safety involved in the examination and treatment of patients.

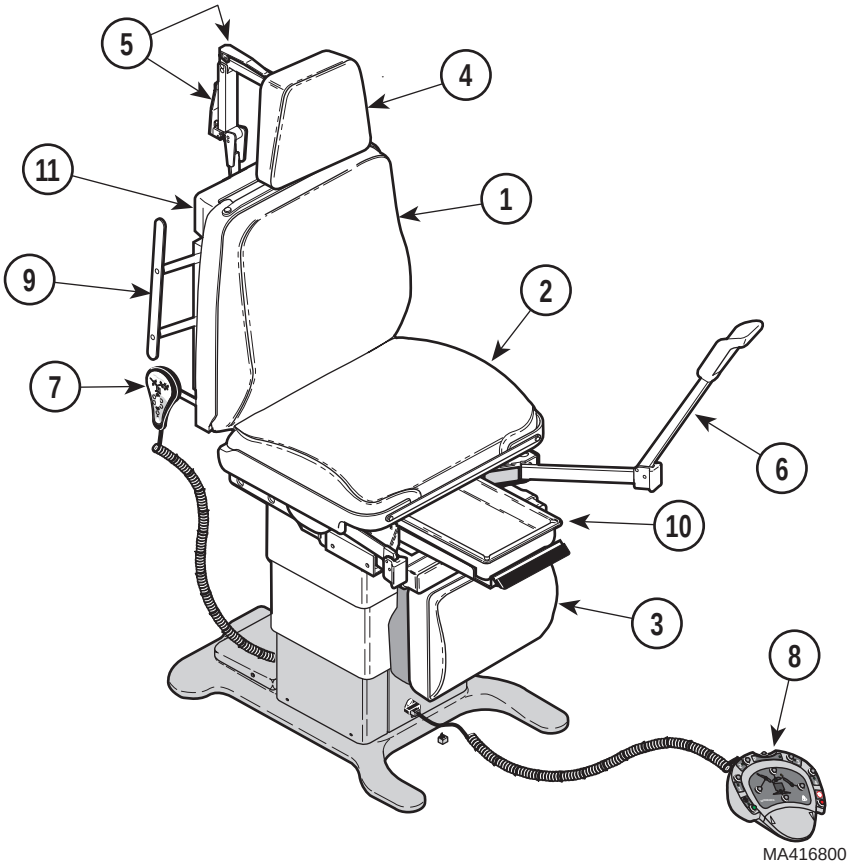
Features

The 411 Programmable Power Examination Table has . . .

- powered positioning of its four functions; back up and down, tilt up and down, foot up and down, and table up and down.
- a programmable function which allows the operator to store up to four favorite table positions for quick and easy repetitive use.
- a Home position function which allows for quicker, easier, and safer patient dismount.
- a hand control, ergonomically designed to fit comfortably in the palm of the operator's hand, for positioning the table top for an examination or procedure.
- an optional foot control, which allows the operator to position the table for an examination or procedure without breaking the sterile field.
- a manually adjustable head rest which may be adjusted to allow the operator to position the patient's head in a specific position or orientation.
- a manually adjustable leg rest which may be adjusted into a procto knee rest position for proctologic examinations.
- right and left stirrups which can be extended to an infinite number of positions as well as laterally in three positions.
- two 1 in. (2.5 cm) tall x 3/8 in. (0.95 cm) wide accessory rails to allow use of mounted accessories with table.
- a paper roll holder which is hidden in the head end of the upholstered top, and tear strips, located at the foot end and head end of the upholstered top, to secure examination paper during a patient examination or procedure.
- a treatment pan which provides a convenient container to hold or store items or debris for or from an examination or treatment. The treatment pan is not intended to hold more than one ounce (29.6 ml) of fluid.
- built in diagnostics which allow for quicker and better servicing of the table should a malfunction occur.

COMPONENTS OVERVIEW

The illustration below shows the location of the table's major components and the chart below provides their descriptive name.



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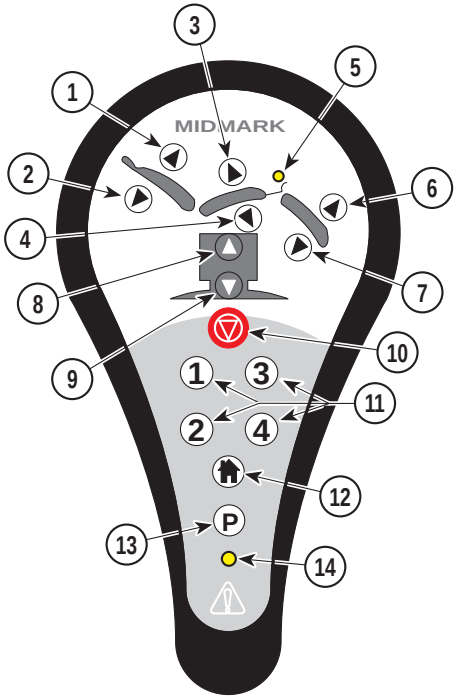
DESCRIPTION OF COMPONENTS

1. Back Section (adjustable angle)	7. Hand Control
2. Seat Section (adjustable tilt)	8. Foot Control (optional)
3. Foot Section (adjustable angle)	9. Accessory Rails
4. Headrest (adjustable)	10. Treatment Pan
5. Headlock Assembly	11. Paper Roll Holder
6. Stirrups	

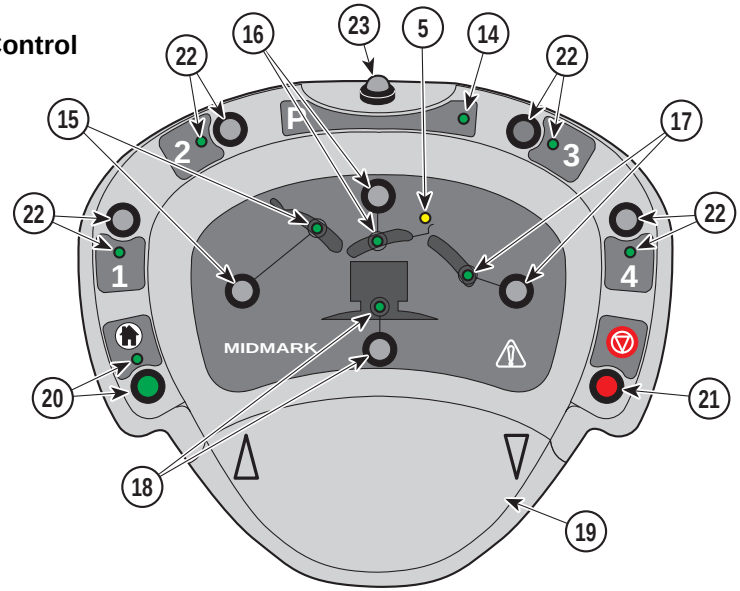
CONTROLS & INDICATORS

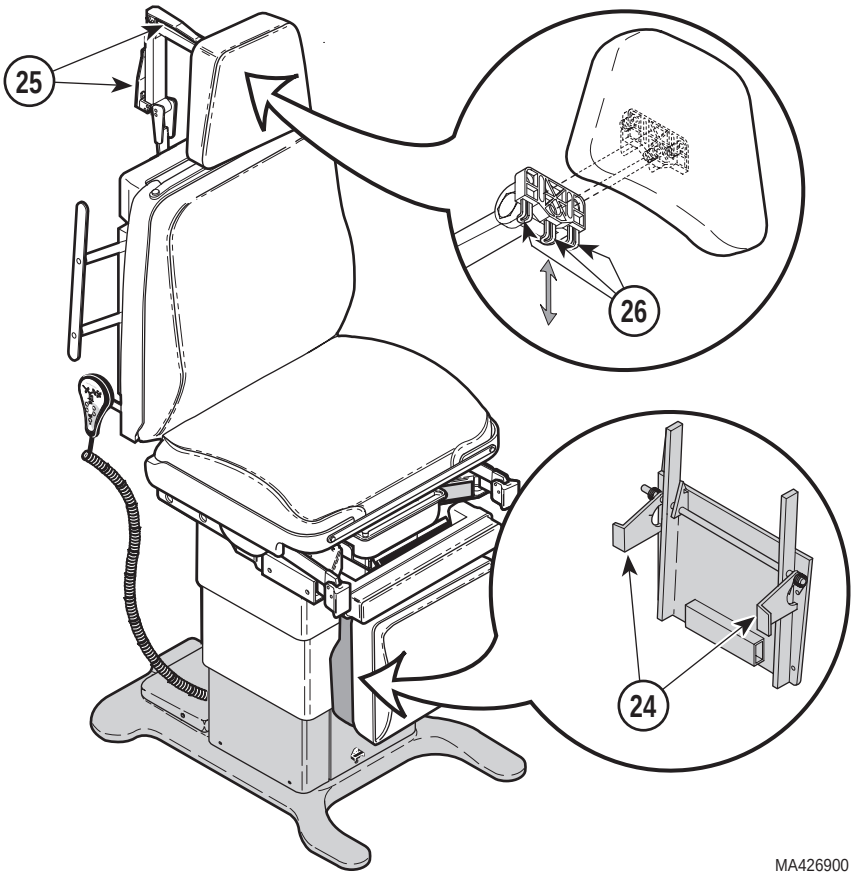
The following illustrations show the location of the table's controls and indicators and the chart on the following pages describes their function.

Hand Control



Foot Control





Ref.	Control	Function
1	*Back Up button*	*when pressed, the back section raises.*
2	*Back Down button*	*when pressed, the back section lowers.*
3	*Tilt Up button*	*when pressed, the front of seat section raises upward, tilting the entire table top.*
4	*Tilt Down button*	*when pressed, the front of seat section lowers downward, tilting the entire table top.*
5	*Pan Out lamp*	*illuminates when an operator attempts to run the Foot Up function or Programmed Position function while treatment pan slide is extended (these functions will not operate while the treatment pan slide is extended).*
6	*Foot Up button*	*when pressed, the foot section raises.*
7	*Foot Down button*	*when pressed, the foot section lowers.*

Ref.	Control	Function
8	*Table Up button*	*when pressed, the entire table top is raised.*
9	*Table Down button*	*when pressed, the entire table top is lowered.*
10	*Stop button*	*when pressed, the Home Position mode or Program mode is interrupted and stopped.*
11	*Programmed Position buttons (1, 2, 3, and 4)*	*when pressed, the table top automatically moves into the position which has been stored into memory for that particular button (movement continues only as long as the button is depressed).*
12	*Home Position button*	*when pressed, the table top automatically lowers to its lowest height for patient dismount.*
13	*Program button*	*when pressed, the program mode is activated. Pressing a programmed position (1, 2, 3, or 4) button now will store the table top's present position in that button's memory.*
14	*Program Mode indicator lamp*	*illuminates to indicate that the Program Mode is activated (stays illuminated for five seconds after Program button is pressed).*
15	*Back Function Selector button & indicator lamp*	*when depressed, the Back function is activated; the up / down foot pedal can now be depressed to position the back section. The indicator lamp illuminates to indicate the Back function is activated.*
16	*Tilt Function Selector button & indicator lamp*	*when depressed, the Tilt function is activated; the up / down foot pedal can now be depressed to position the tilt section. The indicator lamp illuminates to indicate the Tilt function is activated.*
17	*Foot Function Selector button & indicator lamp*	*when depressed, the Foot function is activated; the up / down foot pedal can now be depressed to position the foot section. The indicator lamp illuminates to indicate the Foot function is activated.*
18	*Table Function Selector button & indicator lamp*	*when depressed, the Table function is activated; the up / down foot pedal can now be depressed to position the table top. The indicator lamp illuminates to indicate the Table function is activated.*
19	*Up / Down Foot pedal*	*when the foot pedal is tilted to the left, the function which is activated will be raised. When the foot pedal is tilted to the right, the function which is activated will be lowered. Also used to initiate the "return to home" function after it has been activated.*

Ref.	Control	Function
20	*Home Function Selector button & indicator lamp*	*when depressed, the Home function is activated; depressing the up / down foot pedal **to the right** will cause the "return to Home" function to begin. The indicator lamp illuminates to indicate the Home function is activated.*
21	*Stop button*	*when depressed, the Home mode or the Program mode is interrupted and stopped.*
22	*Programmed Position buttons (1, 2, 3, and 4) & indicator lamp*	*when depressed, the Programmed Position function is activated for that button and its indicator lamp illuminates to indicate that the function is activated. Depressing the up / down foot pedal now will cause the table top to automatically move into the position which has been stored into memory for that particular button (movement continues only as long as the foot pedal is depressed).*
23	*Program button*	*when depressed, the Program mode is activated. Pressing a Programmed Position (1, 2, 3, or 4) button now will store the table top's present position in that button's memory.*
24	*Foot Rest Release handles*	*used to release foot rest so it may be removed from table or placed in a Procto position.*
25	*Head Lock handles*	*used to unlock the headlock assembly so it may be positioned and then relocked in the desired position.*
26	*Headrest Releases*	*Three quick releases are used to quickly remove headrest from headlock assembly so it may be replaced with a different type headrest.*

OPERATION

DANGER

Do not use this table in an explosive or oxygen-rich atmosphere. To do so could result in an explosion or fire.

If the table malfunctions, immediately remove your hand or foot from button / foot pedal, unplug the power cord from the receptacle, and assist the patient from the table. If table continues to malfunction, call for service; do not attempt to repair table yourself.

Keep personnel and equipment clear of the table before initiating power movement to avoid personal injury or equipment damage.

EQUIPMENT ALERT

For optimal table performance, allow the table to reach room temperature before operating.

NOTE

This equipment is not designed for continuous operation; each motor has a thermal overload safety switch to protect it from overheating. If the unit is operated continually, causing one of the motors to exceed its allowable operating temperature, the thermal overload safety switch for that function will shut off the motor. If normal operation of a function ceases, immediately stop attempting to operate the table and allow the function to cool for 10 to 15 minutes before using again. The thermal overload safety switch will automatically reset when the motor cools to a safe operating temperature.

Power Features

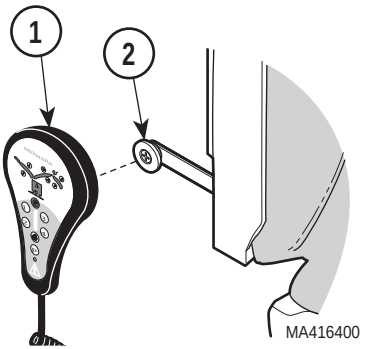
Each motor (back actuator, tilt actuator, table actuator, and foot actuator) has a thermal overload safety switch to prevent the motor from overheating and being damaged. Each motor is also protected by a fuse to prevent excessive current draw. If operation of a function does not return after a cooling period of one hour, contact your dealer or an authorized service center for repair (See Calling For Service in this manual).

The table's four powered table functions are controlled by either the hand control or foot control (optional).

Hand Control

EQUIPMENT ALERT
The hand control is moisture resistant and runs on low voltage, greatly reducing hand control shock hazards. To avoid temporary or permanent damage to the hand control or prevent possible shock, do not immerse the hand control in water / fluids.

To use the hand control (1), remove the hand control from its hanger (2), by pulling straight up, and hold it in the palm of your hand, or if desired, let the hand control remain mounted on the hanger. Depress the button of the desired function to activate that function. There are two alert indicator lamps on the hand control to alert the operator to particular conditions. If removed, replace the hand control (1) on its hanger (2) when table positioning is complete. A more detailed description of each of the hand control functions is included throughout the remainder of this section.



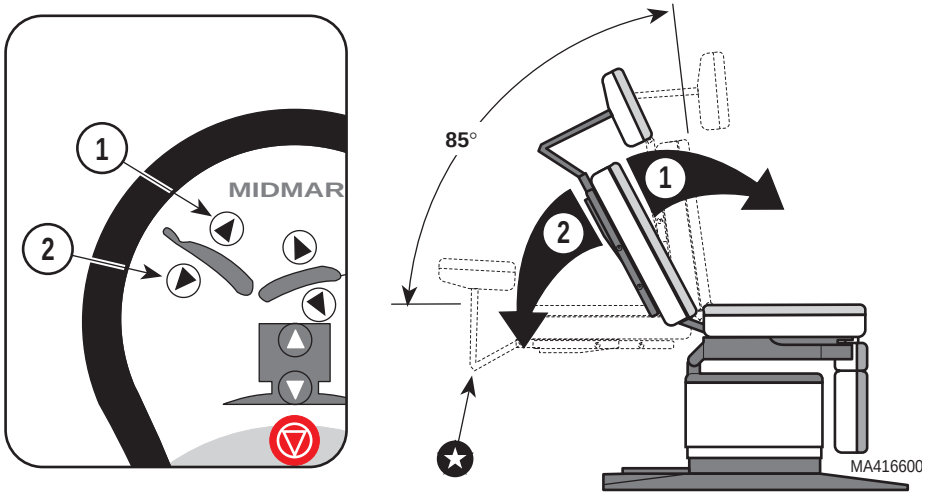
Back Section Positioning

CAUTION
Keep foreign objects away from foot control. Also, be sure the foot control is not positioned below the foot section or headlock assembly of the table so that the pedals and switches of the foot control are not inadvertently activated. Failure to do so could result in a frightened patient and / or damage to table.

EQUIPMENT ALERT
The Back function will automatically stop moving when either the UP or Down travel limit is reached, but the actuator motor will continue to run. Do not continue to operate a function that has reached its limit; this will cause the motor to exceed its allowable operating temperature and be stopped by its thermal overload switch, and may reduce the life of the actuator motor.

The back section can be positioned at any angle between horizontal and +85°.

To adjust the back section from a horizontal position to a chair position, depress and hold the Back Up button (1) until the back section reaches the desired angle or the chair position is achieved. ***To adjust the back section from***



a chair position to a horizontal position, depress and hold the Back Down button (2) until the back section reaches the desired angle or the horizontal position is achieved.

Depending on how the headrest is positioned, the headlock arm (✪) may collide with the floor or other object when the head end of the table top is being lowered. To correct a collision situation, use the Tilt Down or Table Up functions to raise the headlock arm off of the floor (or other object it is contacting). Now, Back Down operation may be continued.

Tilt Function Positioning (Table Top Angle)

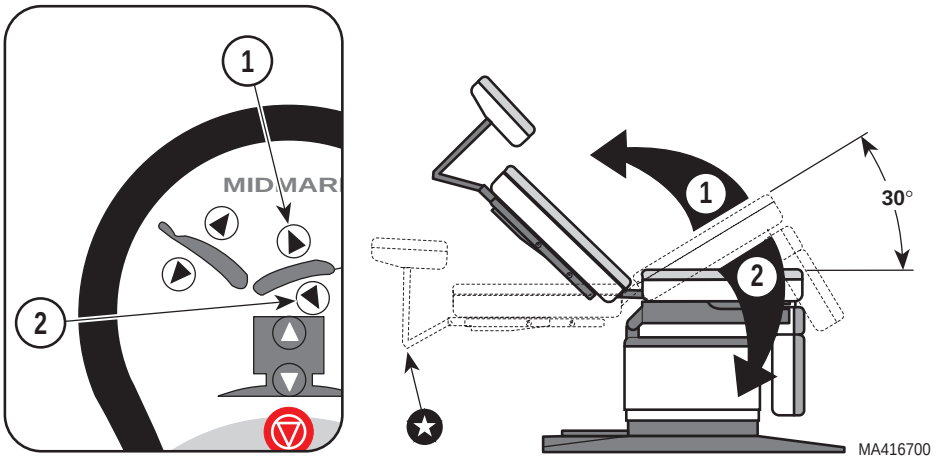
CAUTION

Keep foreign objects away from foot control. Also, be sure the foot control is not positioned below the foot section or headlock assembly of the table so that the pedals and switches of the foot control are not inadvertently activated. Failure to do so could result in a frightened patient and / or damage to table.

EQUIPMENT ALERT

The Tilt function will automatically stop moving when either the UP or Down travel limit is reached, but the actuator motor will continue to run. Do not continue to operate a function that has reached its limit; this will cause the motor to overheat and may reduce the life of the actuator motor.

The plane of the table top can be positioned at any angle between horizontal and +30° (foot up).



To tilt the head end of the table top downward, depress and hold the Tilt Up button (1) until the table top reaches the desired angle or the maximum downward tilt is achieved. ***To tilt the head end of the table upward***, depress and hold the Tilt Down button (2) until the table top reaches the desired angle or the maximum upward tilt is achieved.

Depending on how the headrest is positioned, the headlock arm (✪) may collide with the floor or other object when the head end of the table top is being lowered. To correct a collision situation, use the Back Up or Table Up functions to raise the headlock arm off of the floor (or other object it is contacting). Now, further Tilt Up operation may be continued.

Table Function Positioning (Table Height)

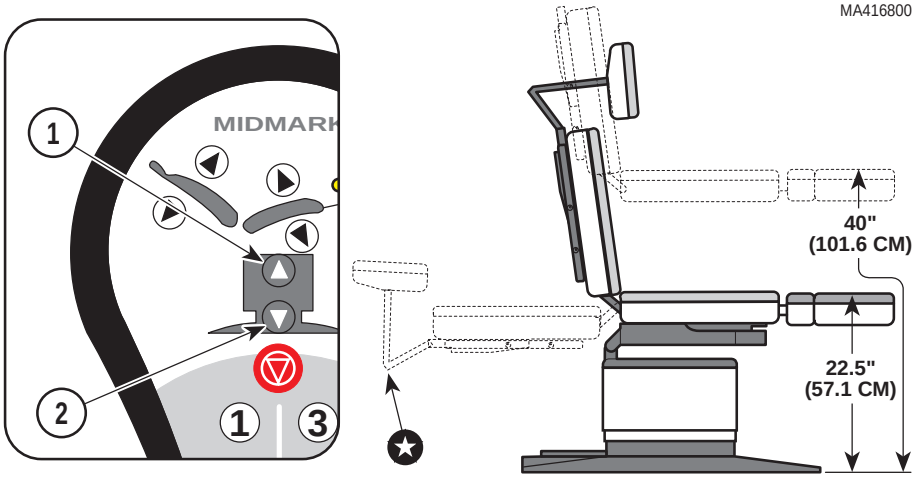
CAUTION

Keep foreign objects away from foot control. Also, be sure foot control is not positioned below foot section or headlock assembly of table so that pedals and switches of foot control are not inadvertently activated. Failure to do so could result in frightened patient and/or damage to table.

NOTE

The Table function will automatically stop moving when either the Up or Down travel limit is reached. Even if its button is depressed, the actuator will not continue to run (as the other actuator motors will). Sensors prevent the actuator motor from running when it has reached its Up or Down travel limit, preventing excessive wear of actuator due to the full weight of table and patient.

The table top can be positioned at any height between 22.0 - 40 in. (55.9 - 101.6 cm).



To raise the table top upward, depress and hold the Table Up button (1) until the table top reaches the desired height or the maximum height is achieved. ***To lower the table top downward***, depress and hold the Table Down button (2) until the table top reaches the desired height or the minimum height is achieved.

Depending on how the headrest is positioned, the headlock arm (✪) may collide with the floor or other object when the table top is being lowered. To correct a collision situation, use the Back Up or Tilt Down functions to raise the headlock arm off of the floor (or other object it is contacting). Now, further Table Down operation may be continued.

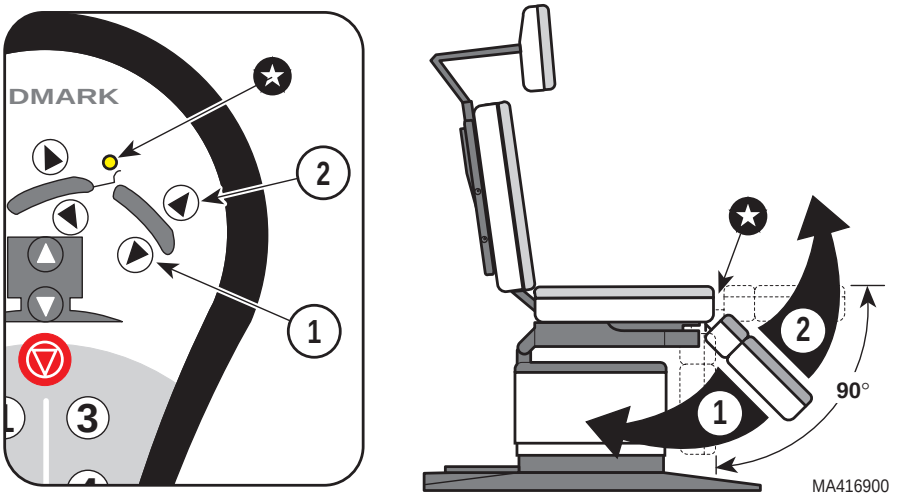
Foot Section Positioning

EQUIPMENT ALERT

The Foot function will automatically stop moving when either the Up or Down travel limit is reached, but the actuator motor will continue to run. Do not continue to operate a function that has reached its limit; this will cause the motor to overheat and may reduce the life of the actuator motor.

The foot section can be positioned at any angle between horizontal and -90°.

To adjust the foot section from a horizontal position to a vertical position, depress and hold the Foot Down button (1) until the foot section reaches the desired angle or the vertical position is achieved. ***To adjust the foot section from a vertical position to a horizontal position***, depress and hold the Foot Up button (2) until the foot section reaches the desired angle or the horizontal position is achieved.



A safety switch prevents operation of the Foot Up function when the treatment pan slide (✪) is extended; this prevents the foot section from colliding with the treatment pan slide. If the Foot Up function is not operable, but the Foot Down function is, check to ensure that the treatment pan slide is in its fully stowed position. A light clicking sound will be heard just before the treatment pan slide reaches its fully stowed position. Also, if the Pan Out lamp (✪) is illuminated when the Foot Up button is depressed, this indicates that the treatment pan slide is not in its stowed position.

Multiple Function Positioning

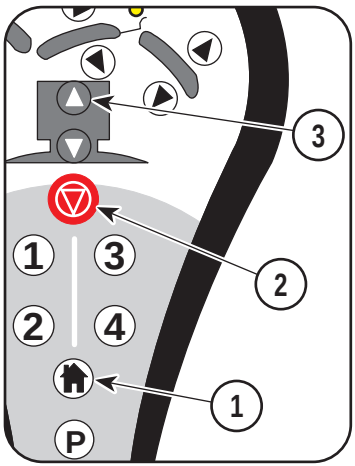
When using the hand control, multiple functions can be operated at the same time to speed positioning. However, if a function's up and down buttons are pressed at the same time, neither function will move. ***When using the foot control***, only one function may be selected at a time; pressing any other function will deactivate the previously selected function.

Auto Return To Home Position

WARNING
Make sure all personnel, stools, or other equipment are clear of the table before activating the Home function. Failure to do so could result in serious personal injury and / or equipment damage.

The Home position function will lower the table top to its lowest position; the back, tilt, and foot functions will not move.

To activate the return to Home position function, momentarily depress the Home position button (1) on the hand control. If for any reason the table must be stopped, depress the Stop button (2) on the hand control or foot control. If it is desired to interrupt the Home position function to position the table, depress the Table Up button (3). Pressing either button will stop the Home position function and allow the operator to proceed with table positioning using the standard positioning buttons.



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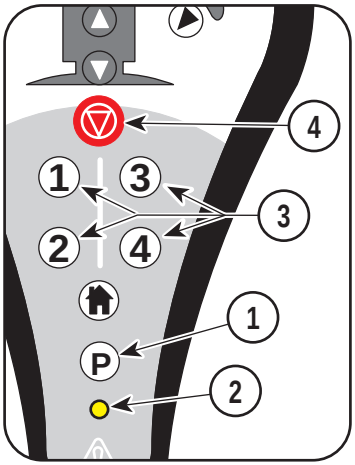
Programming a Favorite Position

The table can be programmed to store up to four operator specified positions in memory. Once a position is stored in memory, only one button must be pressed (and held) to simultaneously operate all four motions of the table, allowing the operator to quickly position the table top as required for frequently performed procedures.

To program a favorite table position into memory:



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1. Position the table top in the desired position using the hand control.

NOTE
Once the Program button (1) has been depressed, the operator has five seconds to press a Program Position button (3) as described in step 3. If a Program Position button is not depressed within the five seconds, the program mode is canceled. If the Program button has been inadvertently depressed and no program change is intended, either depress the Stop button (4) or wait until the Program Mode lamp (2) stops illuminating (5 seconds); the table will retain the original programmed position in its memory.

2. Depress the Program button (1) on the hand control; the Program Mode lamp (2) will illuminate, indicating the table will accept a programmed position into memory within the next five seconds.

NOTE
Any one of the four Program Position buttons (3) may be depressed. Select whichever Program Position button it is desired to have associated with the position.

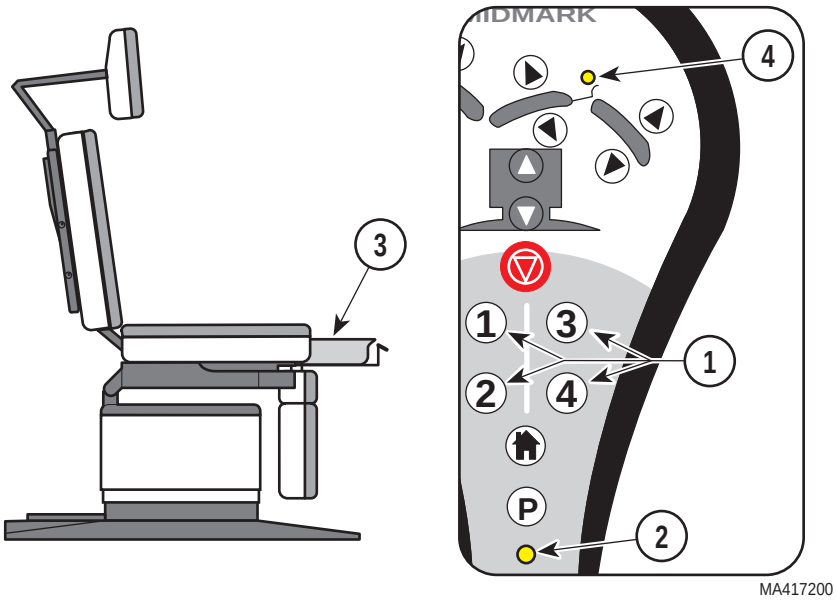
3. Depress one of the four Program Position buttons (3). When a Program Position button (3) has been depressed, the Program Mode lamp (2) will flash three times if the table's position was successfully stored into the table's memory.

If for any reason, it is desired to change a programmed position, simply repeat the three steps above. The new stored position will replace the existing one.

Positioning Table Top Using Program Position Buttons

NOTE
If a Program Position button (1) has been depressed for which no valid position has been stored, the Program Mode lamp (2) will flash until the Program Position button is released and no table movement will occur.

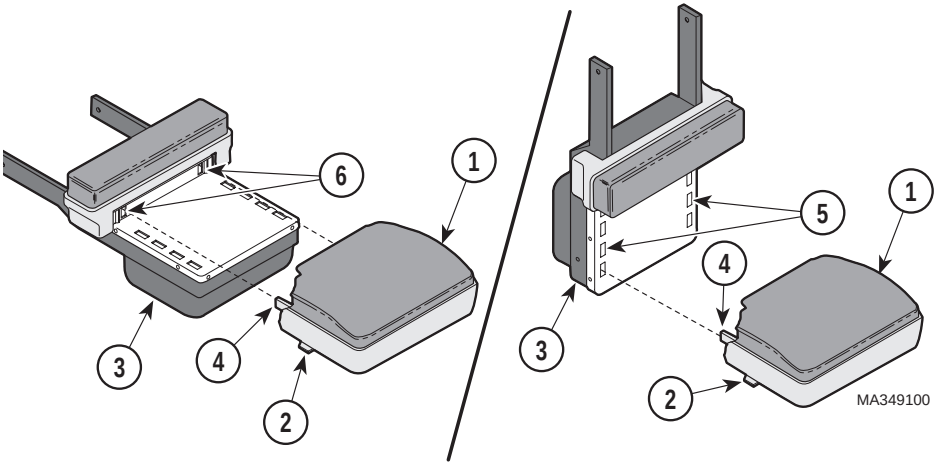
Also, if the treatment pan slide (3) is extended, the Pan Out lamp (4) will illuminate when a Program Position button is depressed and no table movement will occur. To enable programmed table movement, push the treatment pan slide (3) into its stowed position.



To position the table top into a programmed position, simply depress and hold the Program Position button (1), which has the desired position in memory, until table movement stops. If, for any reason, it is desired to stop table movement before the table top reaches its stored position, simply release the Program Position button (1).

Procto Knee Rest Positioning

There are four different height positions in which the procto knee rest (1) can be set for.



To remove the procto knee rest, lift release levers (2) on each side of the procto knee rest (1) and pull the procto knee rest straight away from the table.

CAUTION

Make sure the procto knee rest is securely latched in place before using with patient. Failure to do so could result in serious personal injury.

To position the procto knee rest, lower the foot section (3) all the way down. Then, insert the metal guides (4) of procto knee rest (1) into one of the four procto knee rest positions (5) provided, until the mechanical locking hooks can be seen or heard to engage. Pull on the procto knee rest (1) to ensure that is securely latched in place.

To return the procto knee rest to its stowed position, lift release levers (2) on each side of the procto knee rest (1) and pull knee rest out of procto knee rest position (5). Then, insert the metal guides (4) of procto knee rest (1) into foot rest slots (6) until the mechanical locking hooks can be seen or heard to engage. Pull on the procto knee rest to ensure that it is securely latched in place.

Stirrups

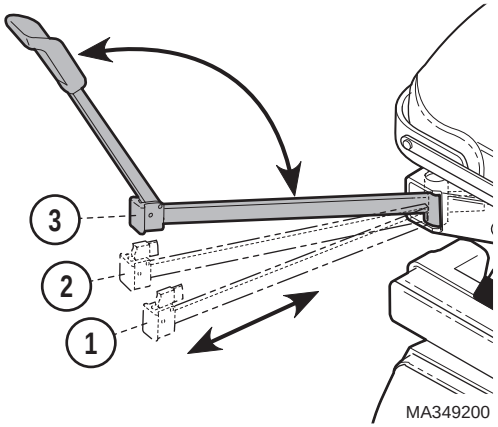
To erect the stirrup, grasp end of stirrup and pull stirrup straight out of table to full extension. Unfold stirrup upward to an erect position.

NOTE
If you are applying any downward pressure on the end of the stirrup when sliding it in or out, it may be very difficult to move. This is normal and is part of the stirrup extension locking mechanism. For ease of movement, lift up slightly while sliding the stirrup in or out.

To adjust the stirrup extension length, hold the end of the stirrup and slide in or out until the desired extension is achieved.

WARNING
Failure to engage the lateral locking mechanism could allow patient to lose balance resulting in personal injury to patient.

To adjust the lateral position of a stirrup, lift end of stirrup and then rotate stirrup to the right or left into one of the three possible lateral positions. The stirrup will click into each position as it is rotated. When the desired position is attained, lower stirrup to engage the lateral locking mechanism. Check that lateral locking mechanism is engaged by attempting to rotate stirrup assembly without lifting on stirrup end.



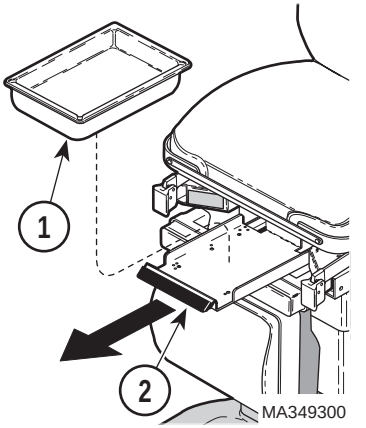
To return stirrup to storage,
grasp end of stirrup and pull stirrup straight out to full extension. Fold stirrup down against bar, rotate stirrup to lateral position 2, and then slide stirrup back into stowed position.

Treatment Pan

NOTE
A safety switch prevents operation of the Foot Up and Program Position functions when the treatment pan slide (2) is extended; this prevents the foot section from colliding with the treatment pan slide. If the Foot Up function is not operable, but the Foot Down function is, check to ensure that the treatment pan slide is fully stowed. A light clicking sound will be heard just before the treatment pan slide reaches its fully stowed position. Also, if the Pan Out lamp illuminates when using the Foot Up or Program Position function, this indicates that the treatment pan slide is not in its stowed position.

To expose the treatment pan (1) for use, grasp the treatment pan slide handle (2) and pull until pan slide is fully extended.

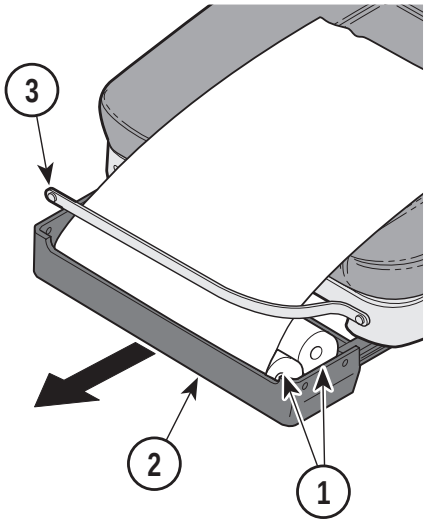
To clean the treatment pan (1); the treatment pan can easily be removed for cleaning when the treatment pan slide (2) is fully extended. To replace the treatment pan (1), align pan and then press pan firmly into pan slide (2).



To stow the treatment pan (1) after use, push in on treatment pan slide handle (2) as far as it will go. A light clicking sound, heard just before the treatment pan slide reaches its fully stowed position, indicates that the pan slide is properly stowed.

Paper Roll

Storage for two standard 18 in. wide x 3 in. diameter (45.7 x 7.6 cm) paper rolls (1) is provided under the upper portion of the back section.



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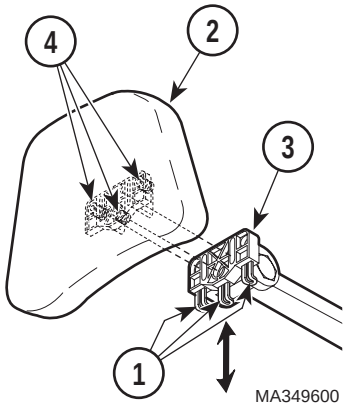
To change a paper roll, access the paper roll storage area by sliding the paper roll holder (2) toward the top of the back section (it is recommended to have the back section in a horizontal position). Insert the paper roll(s) (1) in the paper roll holder (2), drape the end of the paper roll nearest the top of the back section out of the paper roll holder, and then push the paper roll holder down under the back section. Remove one end of paper tear straps (3) and then pull paper over the upholstery. Replace the paper tear straps (3) to help secure the paper. New paper may now be pulled out quickly and easily for each patient.

Headrest Removal / Installation

The headrest can be removed or exchanged with another headrest to facilitate some procedures.



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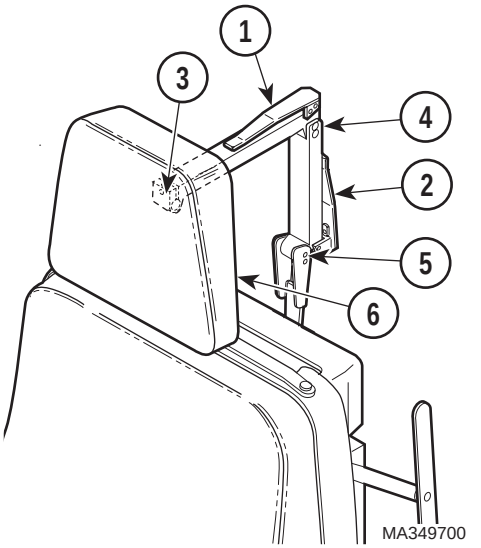
To remove a headrest, pull the three retaining latches (1) outward and then pull up on the headrest (2) to release the headrest from the headrest mount (3).

To install a headrest, align the three headrest studs (4) with headrest mount (3) and then push the headrest firmly onto the headrest mount. Secure the headrest (2) by pushing the three retaining latches (1) inward until they are latched.

Headrest Positioning

WARNING
Make sure headrest is securely locked into position before use. Failure to have the upper and lower handles correctly locked could result in headrest falling during a procedure. This could cause serious personal injury.

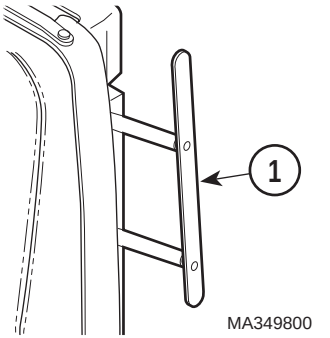
Upper handle (1) and lower handle (2) are used to control the positioning of the headrest by locking and unlocking three rotational joints (3, 4, and 5) of the headlock assembly.



To position the headrest (6), grasp upper handle (1) and pull it outward. This releases tension at joints (3 and 4). Position upper arm and headrest as desired; then push inward on upper handle (1) to lock joints (3 and 4) in place. Grasp the lower handle (2) and pull it outward. This releases tension at joint (5). Position lower arm as desired; then push inward on lower handle (2) to lock joint (5) in place. Repeat these steps until the headrest (6) is positioned as desired. Make sure upper and lower handles (1 and 2) are locked correctly (a handle is locked correctly when it is pushed past center and the force of the clamping action pulls the handle into locked position and holds it there).

Accessory Rails

A 3/8 in. wide (9.5 mm) x 1 in. (25.4 mm) tall accessory rail (1) is located along each side of the back section for mounting of authorized accessories.



Foot Control Operation (optional)

CAUTION

Keep foreign objects away from the foot control. Also, be sure the foot control is not positioned below the foot section or headlock assembly of the table so that the pedals and switches of the foot control are not inadvertently activated. Failure to do so could result in a frightened patient and / or damage to the table.

EQUIPMENT ALERT

The foot control is moisture resistant and runs on low voltage, greatly reducing foot control shock hazards. However, to avoid temporary or permanent damage to the foot control or prevent possible shock, avoid immersing the foot control in water / fluids.

Place the foot control where it will not be in the way of other staff members, but can easily be reached by the operator.

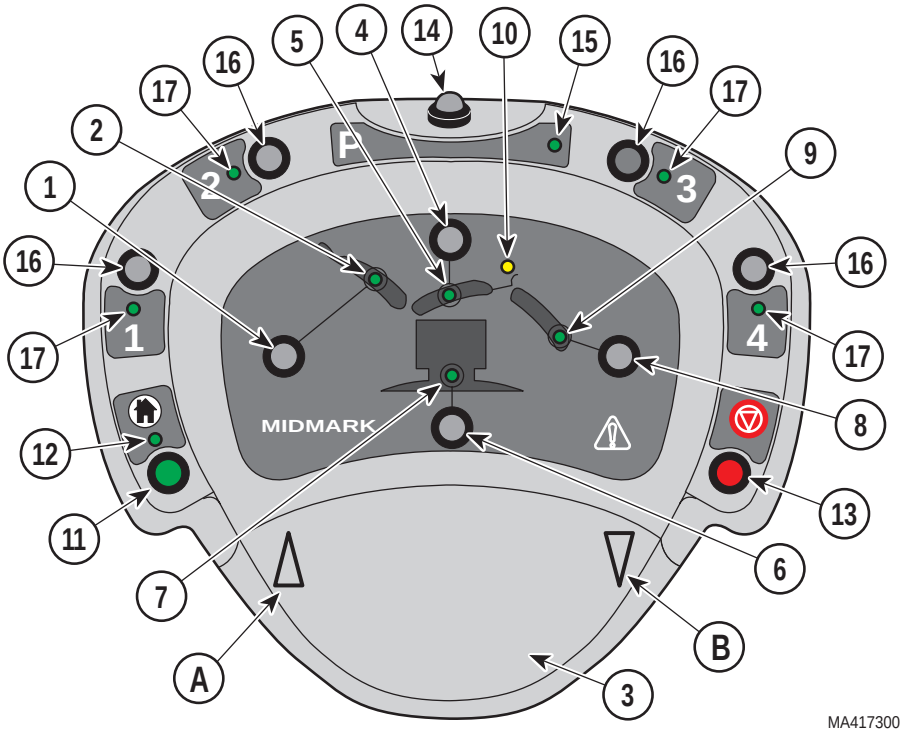
NOTE

Once a function button is depressed, the function remains activated for 10 seconds or until another function is selected; only one function may be selected at a time. When a function is moved or reselected using the foot pedal, the function's activation time is reset for another 10 seconds.

To adjust back section, depress Back function button (1) to activate the Back function; the Back function indicator lamp (2) will illuminate to indicate that Back function is activated. Then, depress and hold foot pedal (3) to the ***left*** (A) to raise the back section as desired or depress and hold foot pedal (3) to the ***right*** (B) to lower the back section as desired.

To adjust table top angle, depress Tilt function button (4) to activate the Tilt function; the Tilt function indicator lamp (5) will illuminate to indicate that Tilt function is activated. Then, depress and hold foot pedal (3) to the ***left*** (A) to tilt head end of table downward or depress and hold foot pedal (3) to the ***right*** (B) to tilt head end of table upward.

To adjust table top height, depress Table function button (6) to activate the Table function; the Table function indicator lamp (7) will illuminate to indicate that Table function is activated. Then, depress and hold foot pedal (3) to the ***left*** (A) to raise the table top upward or depress and hold foot pedal (3) to the ***right*** (B)



to lower the table top downward.

NOTE
A safety switch prevents operation of the Foot Up function when the treatment pan slide is extended; this prevents the foot section from colliding with the treatment pan slide. The Pan Out indicator lamp (10) illuminates when the treatment pan slide is not fully stowed. To return normal operation, push the treatment pan slide into its fully stowed position; the Pan Out indicator lamp will turn off.

To adjust foot section, depress Foot function button (8) to activate the Foot function; the Foot function indicator lamp (9) will illuminate to indicate that Foot function is activated. Then, depress and hold foot pedal (3) to the ***left*** (A) to raise the foot section or depress and hold foot pedal (3) to the ***right*** (B) to lower the foot section.

To activate auto return to Home position, momentarily depress the Home function button (11) to activate the Home Function; the Home function indicator lamp (12) will illuminate to indicate that Home function is activated. Then, momentarily depress foot pedal (3) to the ***right*** (B), causing the table top to lower (the Home function indicator lamp will turn off and the Table function indi-

cator lamp will illuminate for 15 seconds). If, for any reason, the table must be stopped, depress the Stop button (13) or UP button (A). If it is desired to interrupt the Home function, depress the foot pedal (3) to the ***left*** (A) to raise the table top or depress any other function button. Depressing any button will interrupt and stop the Home function and enable the function which was depressed.

To program a favorite position into memory:

The table can be programmed to store up to four operator specified positions in memory. Once a position is stored in memory, only one button must be pressed (and held) to simultaneously operate all four motions of the table, allowing the operator to quickly position the table top as required for frequently performed procedures.

1. Position table top in desired position using foot control.

NOTE
Once the Program button (14) has been depressed, the operator has five seconds to press one of the four Program Position buttons (16) as described in step 3. If a Program Position button is not depressed within the five seconds, the program mode is canceled. If the Program button has been inadvertently depressed and no program change is intended, either depress the Stop button (13) or wait until the Program Mode indicator lamp (15) stops illuminating (5 seconds); the table will retain the original programmed position in its memory.

2. Depress Program button (14) on foot control; the Program Mode indicator lamp (15) will illuminate, indicating the table will accept a programmed position into memory within the next five seconds.

NOTE
Any one of the four Program Position buttons (16) may be depressed. Select whichever Program Position button it is desired to have associated with the position.

3. Depress one of the four Program Position buttons (16). When a Program Position button (14) has been depressed, the Program Mode indicator lamp (15) will flash three times if the table's position was successfully stored into the table's memory.

If for any reason, it is desired to change a programmed position, simply repeat the three steps above. The new stored position will replace the existing one.

To position table top into a programmed position, depress the programmed position button (16) which has the desired position in memory; the programmed position button's L.E.D (17) will illuminate to indicate the function is activated.

Then, depress and hold foot pedal (3) to the ***left*** (A) or ***right*** (B) until table movement stops. If, for any reason, it is desired to stop table movement before the table top reaches its stored position, simply release the foot pedal (3).

List of Authorized Accessories

Listed below are the accessories which are authorized for use with this table.

Accessory Name	Order Number	Restrictions / Intended Use
Chair Arm Set Assembly	9A43003	***Intended Use*** - To provide support and comfort to the patient's arms during general examinations.
Facial Pad	9A51001	***Intended Use*** - To provide stability for head during examinations / procedures. Used with a standard headrest and on 9A19900X special procedures headrest.
IV Pole	9A77001	***Restrictions -*** Must be removed or rotated clear of moving parts before positioning table. Also, the IV Pole may interfere with an 8 ft. (20.3 cm) ceiling. ***Intended Use*** - To provide secure support for the fluid for an IV infusion. Used with a 9A205 Base Rail.
Vision Block Screen	9A78001	***Restrictions -*** Must be removed or rotated clear of moving parts before positioning table. ***Intended Use*** - To obscure the patient's vision of a general procedure / examination. Used with a 9A205 Base Rail.
Articulating Armboard	9A81001	***Restrictions -*** Do not use with any other accessory on the same side of table. Use caution when positioning this accessory and positioning table***.*** ***Intended Use*** - To hold an arm in a secure position.
Special Procedures Armboard	9A82001	***Restrictions -*** Do not operate table with this accessory installed. ***Intended Use*** - To provide positioning and restraint for an arm during a minor procedure on the hand.
Instrument Tray Assembly	9A83001	***Restrictions -*** Must be removed or rotated clear of moving parts before positioning table. ***Intended Use*** - To hold instruments used during an examination or general procedure. Used with a 9A205 Base Rail.
Foot Rest Step	9A85002	***Intended Use*** - To provide a firm and durable step when the foot section of the table is placed in a step position.
Upholstery Cover Set	9A87001	***Intended Use*** - To provide three covers for the upholstered sections of the head, body, and foot area of the examination table.
Knee Crutch Assembly	9A144001 9A144002 9A144003 9A144004	***Restrictions -*** Do not use simultaneously with 9A21300X, Caster Base Assembly***.*** ***Intended Use*** - To provide support for the knee and legs for pelvic examinations.

Accessory Name	Order Number	Restrictions / Intended Use
Side Rail Assembly	9A157001	***Intended Use*** - To provide patient security.
Fixed Armboard Assembly	9A179002	***Restrictions -*** Do not use with any other accessory on the same side of table. Use caution when positioning this accessory and positioning table. ***Intended Use*** - To hold the arm in a secure position, while the table is in a flat position, as the fixed armboard has limited up and down movement and some side-to-side movement.
Welch Allyn Hanger	9A182001	***Intended Use*** - To hold a Welch Allyn light on the table. Used with a 9A205 Base Rail.
Round Headrest Assembly	9A198001	***Intended Use*** - To provide access to the patient's head during an examination / procedure.
Procedure Headrest Assembly	9A199001	***Intended Use*** - To provide access to the patient's head during an examination / procedure.
Base Rail Assembly	9A205001 9A205002	***Restrictions -*** Do not use simultaneously on the same side of table with 9A22700X, Seat Rail Assembly. ***Intended Use*** - To provide a secure and stationary support for the attachment of other accessories (9A77 IV Pole, 9A78 Vision Block screen, 9A83 Instrument Tray, 9A182 Welch Allyn Bracket) of which the multiple attachment of these accessories, at the same time, is not recommended.
Knee Crutch Assembly	9A208001 9A208002	***Restrictions -*** Do not use simultaneously with 9A21300X, Caster Base Assembly. ***Intended Use*** - To support the knee and legs for pelvic examinations.
Caster Base Assembly	9A213001	***Restrictions -*** Do not use simultaneously with 9A14400X and 9A20800X, Knee Crutch Assembly***.*** ***Intended Use*** - To attach to the examination table to allow for mobility of the examination table.
Restraint Belts	9A214001 9A214002	***Intended Use*** - To confine the patient to the table during an examination / general procedure.
One Arm Wrist Rest	9A221001 9A221004	***Intended Use*** - To provide a headrest with one back mechanism which is less maneuverable but provides more room in the back of the chair during examinations / procedures. The attached wrist rest provides wrist support during an examination / procedure while the chair is in a flat position.
Seat Rail Assembly	9A227001 9A227002	***Restrictions -*** Do not use simultaneously on same side of table with 9A20500X, Base Rail Assembly. ***Intended Use*** - To provide a secure support for the attachment of Midmark accessories to the seat section of the table.
Siderail Socket Accessory	9A229001	***Intended Use*** - To allow Midmark accessories to be secured onto the 9A227, Seat Rail.

Accessory Name	Order Number	Restrictions / Intended Use
Foot Control Assembly	9A236001	***Intended Use*** - To position the table before, during, or after an examination or general procedure by using the foot.
Instrument Tray (double arm)	9A267001	***Restrictions -*** Must be removed or rotated clear of moving parts before positioning table. Total weight allowed to be placed on tray is not to exceed 15 lbs (6.8 kg), centered on tray. Do not use more than one 9A267, Instrument Tray simultaneously on same side of table. ***Intended Use*** - To hold instruments used during an examination or general procedure. Used with a 9A272 Base Rail.
Instrument Tray (single arm)	9A267002	***Restrictions -*** Must be removed or rotated clear of moving parts before positioning table. Total weight allowed to be placed on tray is not to exceed 30 lbs (13.6 kg), centered on tray. Do not use more than one 9A267, Instrument Tray simultaneously on same side of table. ***Intended Use*** - To hold instruments used during an examination or general procedure. Used with a 9A272 Base Rail.
Instrument Tray (only)	9A268001	***Intended Use*** - To provide additional tray(s) for use with 9A267 Instrument Tray. Used with a 9A267 Instrument Tray.
Upholstery Kits	002-0485-xx 002-0486-xx *xx - specifies color; call for available colors.*	***Intended Use*** - To allow a facility to install the type of upholstered top which best suits their needs.

Patient Positioning

The table is designed to accommodate the following examination positions:

- Flat Table Position
- Chair Position
- Lithotomy (Pelvic) Position

OPERATOR MAINTENANCE

Preventive Maintenance

Little routine maintenance is required other than periodic inspection of the electrical cord to ensure it is free of cuts or damage, periodic inspection of the mechanical functions to ensure satisfactory operation, and a periodic check of fasteners to ensure they are present and tightened securely.

Oil moving parts (such as back, tilt, and foot hinge, treatment pan slides, and the stirrup index button) with a light machine oil to assure quiet, smooth, and dependable operation. Stirrup bars and accessory rails can be lubricated using

common household furniture wax.

Have your authorized dealer inspect your table every six months.

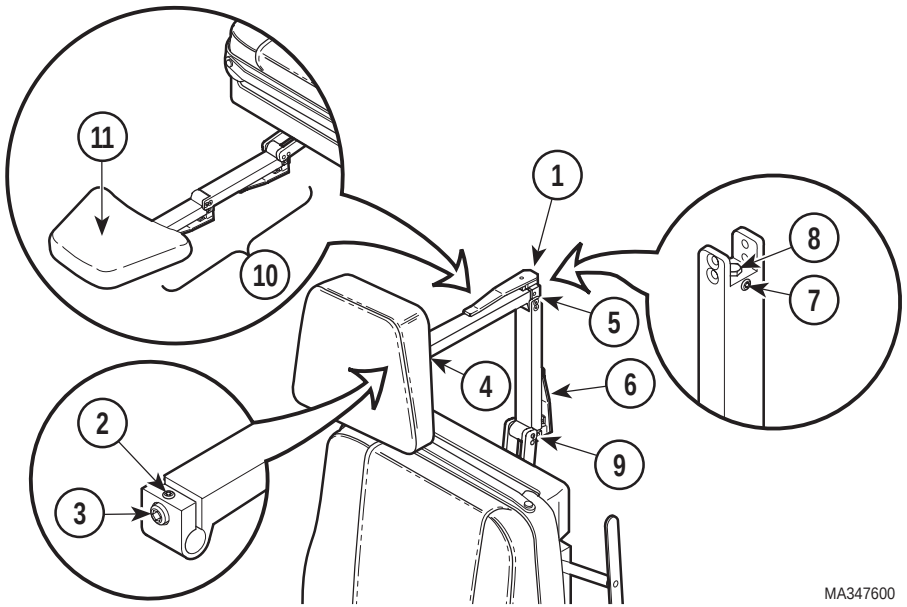
Care of Table

EQUIPMENT ALERT

The upholstery material that covers the top of the table is resistant to most medicinal-type stains, but may be damaged by solvents and dyes. Remove any fluids which are spilled on the upholstery immediately.

Clean the table weekly, wiping the painted metal and plastic surfaces with a clean, soft cloth. If desired, mild cleaners may be used. Periodic applications of common furniture wax will ease cleaning and help maintain the finished luster of the table.

Headlock Assembly Adjustment



The wrenches necessary to adjust the headlock assembly have been provided. These wrenches are in a bag which has been attached to the headlock assembly of the table. Remove this bag of wrenches before using the table and store

these tools with the Installation & Operation Manual.

WARNING

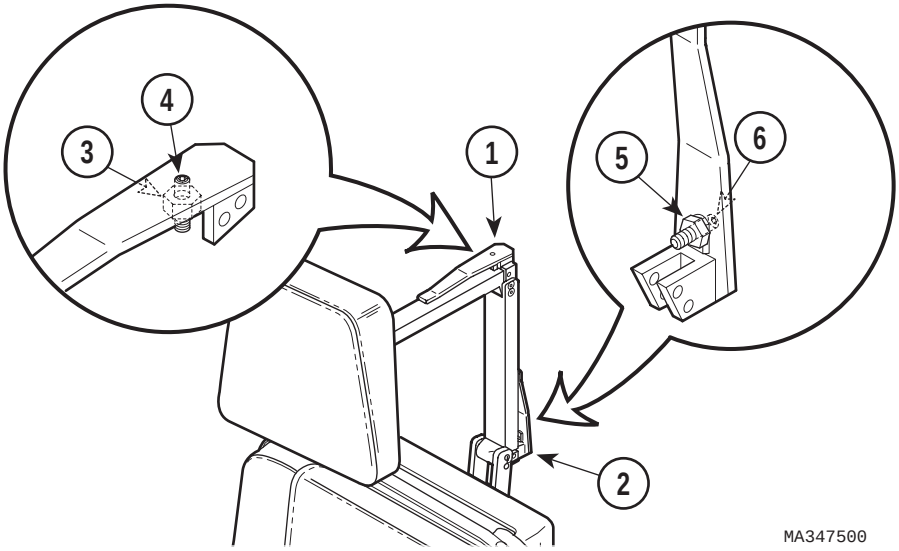
Failure to adjust the headlock assembly to specifications could result in a failure during a procedure. This could cause severe personal injury to a patient or the need to terminate the procedure.

NOTE

The maximum force required to unclamp a locking handle should be 17 lbs. (7.7 kgs) and the maximum force required to clamp a locking handle should be 35 lbs. (15.8 kgs).

1. Unlock upper lock handle (1); then loosen setscrew (2).
2. Tighten adjusting screw (3) slightly; then lock upper lock handle (1). Repeat this step until joints (4 and 5) have the strongest possible holding power, but operation of upper lock handle (1) is not too difficult. Then, tighten setscrew (2).
3. Unlock lower lock handle (6); then loosen setscrew (7).
4. Tighten adjusting screw (8) slightly; then lock lower lock handle (6). Repeat this step until joint (9) has the strongest possible holding power, but operation of lower lock handle is not too difficult. Then, tighten setscrew (7).
5. Lower Back Down function all the way down.
6. Position the headlock assembly (10) in fully extended position. Then, place a 45 lb. (20.4 kg) weight on the center of headrest (11).
7. ***Observe.*** The headlock assembly (10) should support the test weight without drifting downward. If not, repeat the entire adjustment procedure. If headlock assembly (10) does not meet test standards, do not use the headlock assembly.

Headlock Handle Stops Adjustment



If either the upper lock handle (1) or the lower lock handle (2) fails to lock by "going over center" or if there is not enough finger clearance between the headlock assembly and the handle, perform the following adjustment:

1. Loosen nut (3).
2. Push on upper lock handle (1) until it reaches a point where the upper lock handle wants to lock itself by going over center; then allow the upper lock handle to go over center a few degrees. Hold the upper lock handle (1) in this position and adjust stop screw (4) so the upper lock handle will be forced to stop in this position each time it is locked. Then, tighten nut (3).
3. Loosen nut (5).
4. Push on lower lock handle (2) until it reaches a point where the lower lock handle wants to lock itself by going over center; then allow the lower lock handle to go over center a few degrees. Hold the lower lock handle (2) in this position and adjust stop screw (6) so the lower lock handle will be forced to stop in this position each time it is locked. Then, tighten nut (5).

CALLING FOR SERVICE

If you are having a problem or have a question, refer to the inside front cover of this manual and call your dealer. Make sure that you have the information that is highlighted on the inside front cover of this manual available. If you can't re-

solve your question or problem with your dealer, call the following number:

1-800-Midmark (1-800-643-6275) or 937-526-3662
8:00 a.m until 5:00 p.m. (Eastern Standard Time in the U.S.)
Monday thru Friday, except for standard U.S. holidays.

SPECIFICATIONS

Patient Weight (Maximum)	325 lbs (147.4 kgs) maximum
Weight of Table	515 lbs (233.6 kgs)
Back Section Range	0° (horizontal) to +85° ± 5°
Table Top Height Range	22.0 ± 0.5 in. to 40.0 ± 1.0 in. (55.9 ± 1.3 cm to 101.6 ± 2.5 cm)
Foot Section Range	0° (horizontal) to -90° ± 5°
Table Top Tilt Range	0° (horizontal) to +30° ± 5° (foot up)
Dimensions:	
Upholstered top	27.0 in. wide x 69.25 in. long (68.6 cm x 175.9 cm)
With Headrest Extended	82.75 in. (210.2 cm)
Electrical Requirements	230 VAC ±10% nominal, 50/60 HZ, 8 amps (Max)
Paper Rolls	Can accept two standard paper rolls of 18 in. x 3.0 in. (45.7 cm x 7.6 cm)
Duty Cycle	15 seconds on/5 minutes off (motor run time)
Certifications:	ISO-9001 Certified complies to the applicable revision of the MDD 93/42/EEC.)

LIMITED WARRANTY

SCOPE OF WARRANTY

Midmark Corporation (“Midmark”) warrants to the original purchaser its new Alternate Care products and components (except for components not warranted under “Exclusions”) manufactured by Midmark to be free from defects in material and workmanship under normal use and service. Midmark’s obligation under this warranty is limited to the repair or replacement, at Midmark’s option, of the parts or the products the defects of which are reported to Midmark within the applicable warranty period and which, upon examination by Midmark, prove to be defective.

APPLICABLE WARRANTY PERIOD

The applicable warranty period, measured from the date of delivery to the original user, shall be one (1) year for all warranted products and components.

EXCLUSIONS

This warranty does not cover and Midmark shall not be liable for the following: (1)

repairs and replacements because of misuse, abuse, negligence, alteration, accident, freight damage, or tampering; (2) products which are not installed, used, and properly cleaned as required in the Midmark “Installation” and or “Installation / Operation Manual for this applicable product. (3) products considered to be of a consumable nature; (4) accessories or parts not manufactured by Midmark; (5) charges by anyone for adjustments, repairs, replacement parts, installation, or other work performed upon or in connection with such products which is not expressly authorized in writing in advance by Midmark.

EXCLUSIVE REMEDY

Midmark’s only obligation under this warranty is the repair or replacement of defective parts. Midmark shall not be liable for any direct, special, indirect, incidental, exemplary, or consequential damages or delay, including, but not limited to, damages for loss of profits or loss of use.

NO AUTHORIZATION

No person or firm is authorized to create for Midmark any other obligation or liability in connection with the products.

THIS WARRANTY IS MIDMARK’S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. MIDMARK MAKES NO IMPLIED WARRANTIES OF ANY KIND INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS.

SF-1487 REV. A1

NOTES:

Return To Table Of Contents

Return To Table Of Contents

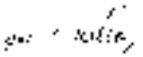
DECLARATION OF CONFORMITY

MIDMARK CORPORATION

Midmark Corporation declares that Model 411-014 conforms to the applicable requirements of the Medical Device Directive 93/42/EEC, Annex VII.

Serial Numbers: HZ001000 to present.

Quality Assurance Manager



Gene Harshbarger
Midmark Corporation
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May 23, 1997

077-0124-00

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